

## Review Instructions for SPRF Proposals

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Each panelist will be assigned 10-13 proposals to read and review. Some of these proposals may be somewhat outside of your immediate comfort zone, and if that is the case, then you should make comments of the common aspects of the proposal (postdoctoral issues, mentorship, professional development of the fellow, etc.) and not necessarily on the scientific research portions of it. No matter what, please do not make statements like “I am not an expert in this area, but ...”. SPRF PIs are alerted that their proposals will be reviewed in a multi-disciplinary panel, so they should be writing their proposals for an audience just like you. Here is the link to the (revised) solicitation – please take a few minutes to read it: <http://www.nsf.gov/pubs/2014/nsf14595/nsf14595.htm>. Each panelist will also be assigned the task of writing panel summaries for a few proposals (4-6). No need to think about that at this point – the instructions for panel summaries will be given to you at the panel meeting. For now, please focus on the reviewing. The review ratings are (E)xcellent, (V)ery Good, (G)ood, (F)air and (P)oor, and intermediate grades of E/V, G/F etc. are also allowed. Please make sure that your written text is in harmony with the rating, that is, don’t rate something Excellent and then point out a lot of negatives, or conversely, praise a proposal a lot then just rate it as only Good. Note that ultimately, proposals that get mostly E and V ratings will get funded; G is an OK rating, but it is somewhat like a passing grade in class (C); if a proposal gets no rating higher than a G, then the panel may decide to not even discuss it. The panel recommendations will be, for each proposal: Highly Competitive, Competitive, or Not Competitive. In my experience, with our budget allocations, we are only able to fund (with rare exceptions) the Highly Competitive proposals and perhaps the top couple of proposals from the Competitive group.

We have a lot of proposals this year, and success rate will be low; there will not be enough time to discuss all these proposals in the panel, and write all those panel summaries. Therefore, I urge you to rate proposals very carefully, and give Vs and Es (and even V/G) only if you really think it should be awarded – and those are the ones we will discuss at the panel meeting. Any proposal that has merit but has significant flaws, should not be rated higher than G – those proposals that get all ratings G or lower, will not have to be discussed – and no panel summary will have to be written for them.

If you find that any required section is missing from the proposal, such as, the project elements in the Overview part of the Project Summary (i.e., explicit information about the fellow, mentor, fellow’s citizenship, year and date of doctoral degree etc.), separate section on “Broader Impacts of Proposed Research” within the project description, or the required section on Interdisciplinarity (for IBSS proposals) or Broadening Participation (for BP proposals), you should downgrade the ratings accordingly.

### Merit Review Criteria

All NSF proposals are evaluated through use of the two National Science Board approved merit review criteria. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The two merit review criteria are listed below. **Both** criteria are to be given **full consideration** during the review and decision-making processes; each criterion is necessary but neither, by itself, is sufficient. Therefore, proposers must fully address both criteria. (GPG Chapter II.C.2.d.i. contains additional information for use by proposers in development of the Project Description section of the proposal.) Reviewers are strongly encouraged to review the criteria, including GPG Chapter II.C.2.d.i., prior to the review of a proposal.

When evaluating NSF proposals, reviewers will be asked to consider what the proposers want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful. These issues apply both to the technical aspects of the proposal and the way in which the project may make broader contributions. To that end, reviewers will be asked to evaluate all proposals against two criteria:

- **Intellectual Merit:** The Intellectual Merit criterion encompasses the potential to advance knowledge; and
- **Broader Impacts:** The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

The following elements should be considered in the review for both criteria:

1. What is the potential for the proposed activity to
  - a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
  - b. Benefit society or advance desired societal outcomes (Broader Impacts)?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

### **SPRF Review Template – must use this template to write your review**

(Please keep the section headings such as “Intellectual Merit” etc., and remove the texts shown in parenthesis. For the Additional Review Criteria, keep the texts of the 5 criteria and put your comments just below each item. Please proofread your text for copying-&-pasting artifacts *after* uploading in the FastLane fields.)

#### **Intellectual Merit**

(Please address strengths and weaknesses)

#### **Broader Impacts**

(Please address strengths and weaknesses)

#### **Additional Review Criteria for SPRF Proposals**

(Reviewers are asked to interpret the two basic NSF review criteria in the context of the SPRF program. In addition, they are asked to respond to the following items – depending on whether you are reviewing SPRF-BP or SPRF-IBSS proposals, choose to respond to item 3 or 4 below.)

1. Is the Sponsoring Scientist (Mentor) a good match to the Fellow Candidate's proposed project, and does the Sponsoring Scientist's (Mentor) involvement in the project strike the right balance between supervisory guidance and the Fellow's independent growth?
2. How well-developed are the Postdoctoral Mentoring Plan and the Data Management Plan?
3. For Track I (BP): How do the proposed activities help increase (directly, indirectly, or both; via the research, or training and outreach activities, or both) the participation and advancement of under-represented groups in SBE fields or, in general, STEM fields, in the U.S.?
4. For Track II (IBSS): How do the proposed activities train the fellow in the interdisciplinary fields and what is the potential contribution of this research on the emerging field(s) identified by this proposal?

#### **Closing Statement and Rationale for Rating**

(Please summarize your review and state briefly the rationale for the rating you have given this proposal)